

TRAV-LER MODEL 5010

TRADE NAME Trav-Ler, Models 5010, 5011, 5012 (Chassis 105)
MANUFACTURER Trav-Ler Karenola Radio & Tele. Corp. - 571 West Jackson - Chicago, Illinois
TYPE SET AC-DC 2 Band Superheterodyne - Self Contained Loop Antenna
TUBES (SIX) Types 12SK7GT RF Amp., 12SA7GT Converter, 12SK7GT IF Amp., 12SQ7GT Det.-AVC-AF, 35L6GT Power Output, 35Z5GT Rectifier.

POWER SUPPLY 110-125 Volts AC-DC Rating .235 Amp. @ 117 Volts AC
TUNING RANGE—BROADCAST 520-1730KC SHORT WAVE 5.4 - 18.3MC

ALIGNMENT INSTRUCTIONS

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
.1 MFD	High side to ant. stator section of tuning gang. Low side to gang frame.	455KC	BC	Any point of no interfering signal.	Across voice coil	A1,A2, A3,A4	Adjust for maximum output. Use isolation transformer if available. If not, isolating capacitor must be connected between generator ground lead and gang frame. Also decrease dummy antenna to .001 MFD to prevent excessive hum modulation.
"	"	1730KC	"	High freq. end of dial. (Min. Cap.)	"	A5	"
200MMFD	High side to ant. lead (blue). Low side to gang frame	1400KC	"	Tune in 1400 KC signal.	"	A6	Adjust for maximum output.
"	"	600KC	"	Tune in 600 KC signal.	"	A7	Rock gang and adjust for maximum output. Recheck at 1730KC for setting of A5.
400Ω res.	"	18.3MC	SW	High freq. end of dial. (min. cap.)	"	A8	Adjust for maximum output. To make sure this is fundamental turn receiver to approx. 17.3MC and a much weaker signal should be heard. This is the image freq.
"	"	16MC	"	Tune in 16MC signal.	"	A9	Adjust for maximum output. Advisable to rock gang slowly while adjusting.
"	"	6MC	"	Tune in 6MC signal.	"		This is a check and no adjustment should be necessary as fixed pad is used.

Volume control at maximum volume and output from signal generator no higher than necessary to obtain output reading. Use insulated alignment screwdriver for adjusting.

PARTS LIST AND DESCRIPTIONS

TUBES

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	INSTALLATION NOTES
		TRAV-LER PART No.	STANDARD REPLACEMENT		
1	RF Amp.	12SK7GT	12SK7GT	8N	
2	Converter	12SA7GT	12SA7GT	8AD	
3	IF Amp.	12SK7GT	12SK7GT	8N	
4	Det.-AVC-AF	12SQ7GT	12SQ7GT	8Q	
5	Power Output	35L6GT	35L6GT	7AC	
6	Rectifier	35Z5GT	35Z5GT	6AD	

CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING		REPLACEMENT DATA						IDENTIFICATION CODES AND INSTALLATION NOTES
	CAP.	VOLT	TRAV-LER PART No.	MALLOY PART No.	SOLAR PART No.	SPRAGUE PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	
7(A)	40	150	EC-4	FF357	DY-3x40-150	EL-340	AF888D	UP6CJ44	Filter
(B)	40	150							"
(C)	40	150							"
8	.05	400	PC-5	TP426	S-4-05	TC-15	484-.05	DT4S5	Line Filter
9	.05	400	PC-5	TP426	S-4-05	TC-15	484-.05	DT4S5	Tone Control
10	.01	400	PC-7	TP421	S-4-01	TC-11	484-.01	DT4S1	35L6 Plate Bypass
11	.01	400	PC-7	TP421	S-4-01	TC-11	484-.01	DT4S1	Audio Coupling
12	.01	400	PC-7	TP421	S-4-01	TC-11	484-.01	DT4S1	"
13	.1	400	PC-8	TP428	S-4-1	TC-1	484-.1	DT4P1	IF Screen Bypass
14	.1	400	PC-8	TP428	S-4-1	TC-1	484-.1	DT4P1	RF
15	.05	400	PC-5	TP426	S-4-05	TC-15	484-.05	DT4S5	AVC Filter
16	.25	400	PC-9	TP430	S-4-25	TC-2	484-.25	DT4P25	Line Isolating
17	.01	400	PC-7	TP421	S-4-01	TC-11	484-.01	DT4S1	Ant. Coupling
18	.05	400	PC-5	TP426	S-4-05	TC-15	484-.05	DT4S5	RF Bypass Rect.
19	220	500	MC-3	MC240	MO.5-325	1FM-325	1468-.00025	5W5T25	Audio Plate Bypass
20	100	500	MC-2	MC235	MO.5-31	1FM-31	1468-.0001	5W5T1	RF Bypass Diode
21	50	500	MC-4	MCB225	MO.5-45	MS-45	1469-.00005	5R5Q5	Osc. Grid Cond.
22	4750	300	MC-1						S.W. Fixed Pad*
23	220	500	MC-3	MC240	MO.5-325	1FM-325	1468-.00025	5W5T25	RF Coupling
*Should be replaced with exact value. A .005 MFD capacitor may be used with some sacrifice of sensitivity and calibration.									

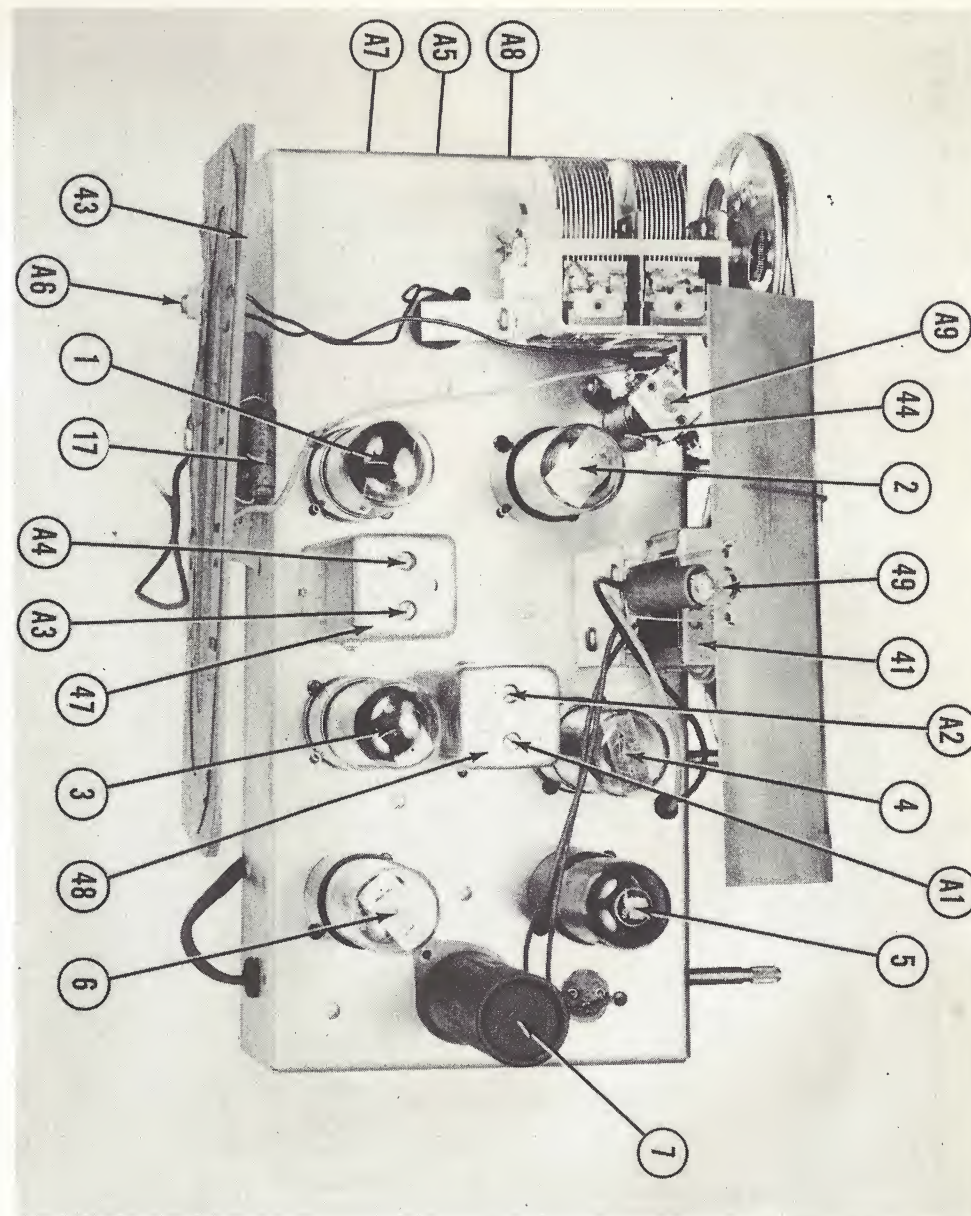
CONTROLS

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES
	RESISTANCE	WATTS	PART No.	MALLOY PART No.	IRC PART No.	CLAROSTAT PART No.	
24(A)	1 Meg.	1	VC-3	MK402	D13-137	AM-63-Z	Volume Control
(B)	Shaft		Not Req.	Not Req.	E	KSS-3	Attach to 24A per instructions
25(A)	25K	1	VC-1	UM129	D11-120	AM-40-S	Tone control
(B)	Shaft		Not Req.	SS25	E	KSS-3	Attach to 25A per instructions
(C)	Switch		"	M26	41	SW-A	" " " "

RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	TRAV-LER PART No.	IRC PART No.	
26	3900Ω	1/2	IR-22	BTS-3900	Or.-White-Red RF Plate Load
27	22KΩ	1/2	IR-9	ETS-22K	Red-Red-Or. Screen Dropping
28	47KΩ	1/2	IR-10	BTS-47K	Yl.-Vl.-Or. Converter Grid
29	22KΩ	1/2	IR-9	BTS-22K	Red-Red-Or. Osc. Grid
30	100KΩ	1/2	IR-24	BTS-100K	Er.-Blk.-Red Plate Filter
31	4 Meg.	1/2	IR-23	BTS-3.9 Meg	Yl.-Blk.-Grn. AVC Network
32	47KΩ	1/2	IR-10	BTS-47K	Yl.-Vl.-Or. Diode Load
33	2 Meg.	1/2	IR-13	BTS-2.2 Meg	Red-Blk.-Grn. 1st AF Grid
34	500KΩ	1/2	IR-11	BTS-470K	Grn.-Blk.-Yl. 1st AF Plate Load
35	240Ω	1/2	IR-5	BW-2-220	Red-Yl.-Br. Output Cathode
36	500KΩ	1/2	IR-11	BTS-470K	Grn.-Blk.-Yl. Output Grid
37	350Ω	1/2	IR-21	BW-1-330	Or.-Or.-Br. Filter
38	220Ω	1/2	IR-5	BW-1-220	Red-Red-Br. " "
39	39Ω	1/2	IR-17	BW-2-39	Or.-White-Blk. Rectifier Ballast
40	470Ω	1/2	IR-5	BTS-470	Yl.-Vl.-Br. Mixer Cathode

CHASSIS—TOP VIEW



PARTS LIST AND DESCRIPTIONS

TRANSFORMER (OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE		DC RES.		TRAV-LER PART No.	STANCOR PART No.	THORDAR'N PART No.	UTAH PART No.	
	PRI.	SEC.	PRI.	SEC.					
41	2040Ω	2.81Ω	149Ω	.59Ω	Part of SPK-4	A3876†	T-14S62†	8775†	†Bend mounting tabs down and mount by original bracket.

SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA			INSTALLATION NOTES
			TRAV-LER PART No.	JENSEN PART No.	UTAH PART No.	
42	FIELD PM	VC IMP. - 2.8Ω	SPK-4	ST-105†	5PY†	†Cut speaker so as to clear volume control shaft. Drill and tap magnet frame or fabricate new mounting bracket.
	CONE DIA. 4-9/16"	VC DIA. 1/2"	NOT READILY REPLACEABLE-USE COMPLETE SPEAKER UNIT.			

R F COILS

ITEM No.	USE	DC RES.		REPLACEMENT DATA		INSTALLATION NOTES
				TRAV-LER	MEISSNER	
		PRI.	SEC.	PART No.	PART No.	
43	Loop Ant.	0Ω	1Ω	LL-2		
44	SW Ant.Coil	.1Ω	.3Ω	LA-2	14-1044	
45	BC Osc.Coil	1Ω	5.5Ω	LO-3	14-1040	
46	SW Osc.Coil	0Ω	0Ω	LO-4	14-1046	
47	Input IF	6Ω	6.5Ω	LI-1	16-1658	
48	Output IF	6Ω	6.5Ω	LI-2	16-1660	

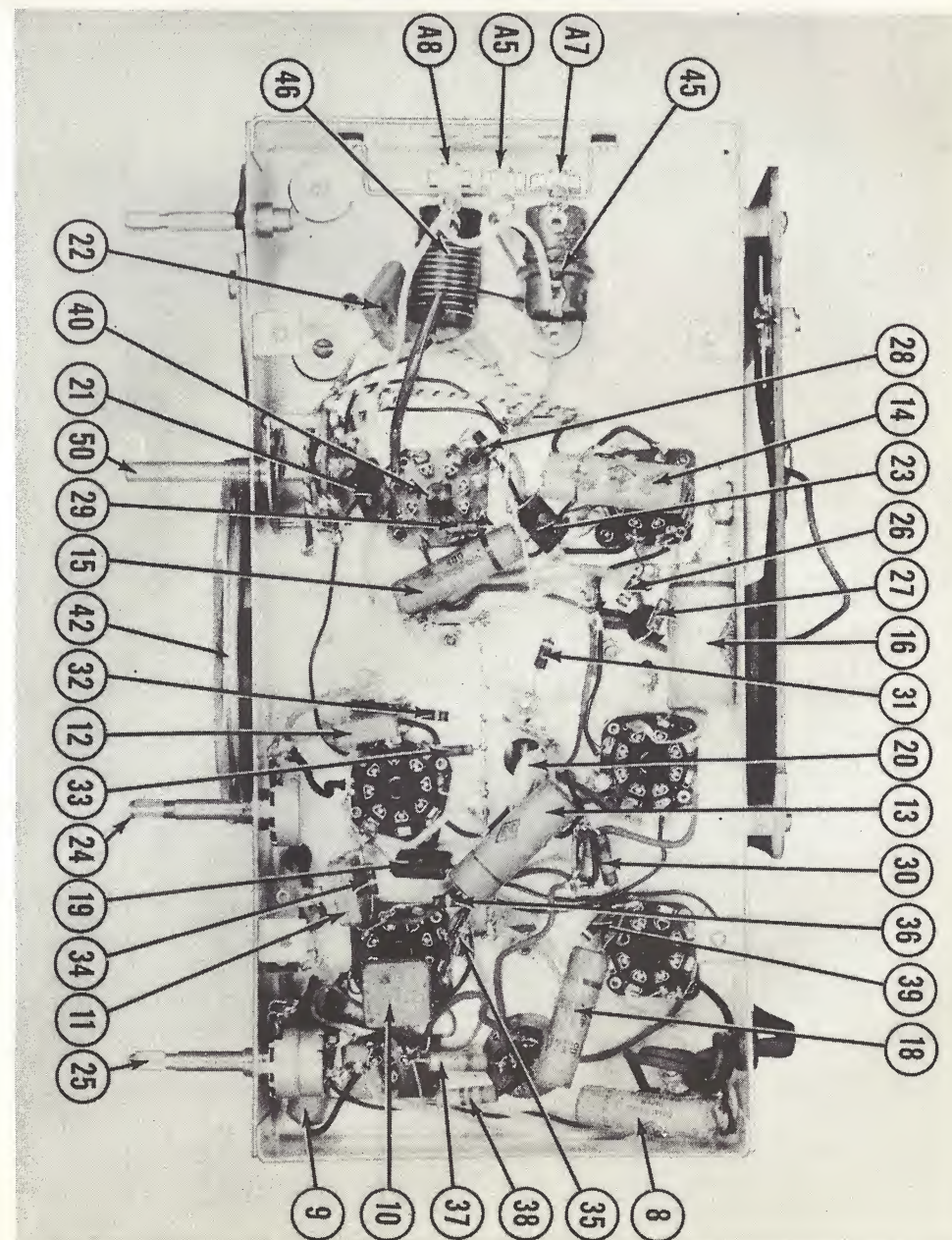
DIAL LIGHT

ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA		INSTALLATION NOTES
					TRAV-LER PART No.		
49	Bayonet	6-8	.15	Brown	PB-1		Type 47

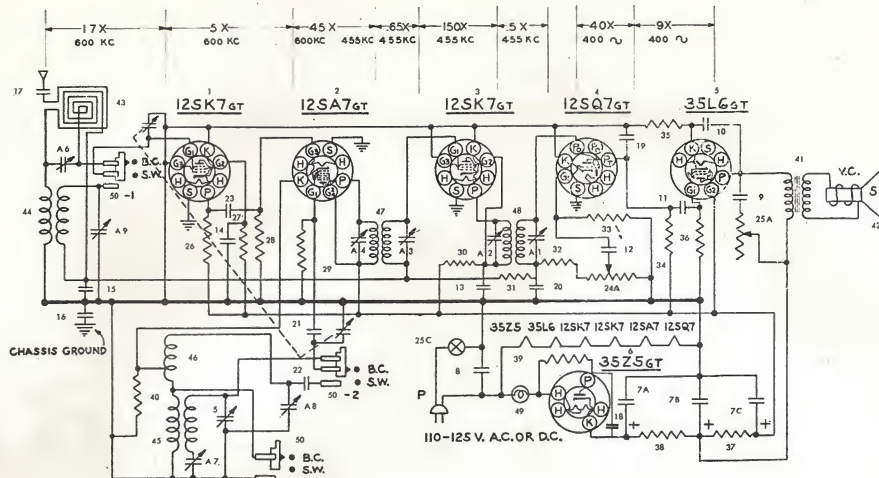
MISCELLANEOUS

ITEM No.	PART NAME	TRAV-LER PART No.	NOTES
50	Band Switch	SW.-1	
A5	Trimmer	TC-1	Oscillator - Broadcast
A6	"	TC-7	Antenna - Broadcast
A7	"		600KC Osc. Padder (Part of TC-1)
A8	"		Short Wave Osc. (Part of TC-1)
A9	"		" Antenna
	Tuning Cap.	TC-8 GC-1	2 gang variable tuning capacitor

CHASSIS—BOTTOM VIEW

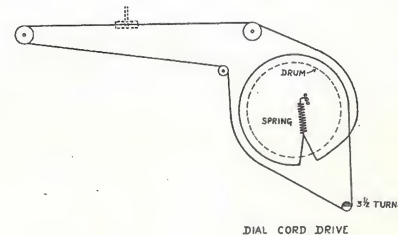
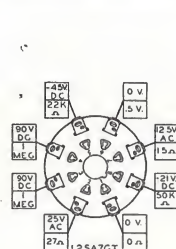
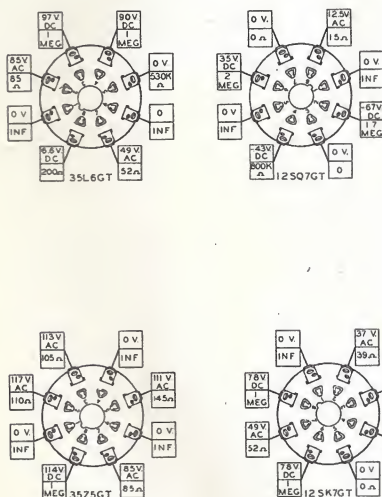


SCHEMATIC DIAGRAM



The stage gain measured values listed above are approximate values for an average operative stage, rather than an absolute value. It should be borne in mind that it is possible to introduce so many variables into the measurement operation, such as, type of equipment used for measuring, handling and placement of probes, the accuracy of alignment, etc., that an absolute reading is impractical. AVC is made inoperative and 3-volt battery bias substituted for measurement.

VOLTAGE AND RESISTANCE ANALYSIS CHART



- 1 - DC Voltage measurements are at 20,000 ohms per volt: AC Voltage measured at 1000 ohms per volt.
- 2 - Socket connections are shown as bottom views.
- 3 - Measured values are from socket pin to common negative.
- 4 - Line voltage maintained at 117 volts for voltage readings.
- 5 - Nominal tolerance on component values makes possible a variation of $\pm 10\%$ in voltage and resistance readings.
- 6 - Volume control at maximum, no signal applied for voltage measurements.

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